

## ABSTRACT OF THE DISCLOSURE

RT-PCR based systems for detection of exogenous and  
5 endogenous avian leukosis/sarcoma viruses in the albumen of  
fertilized and unfertilized poultry eggs have been developed. Such  
systems permit the identification of virus-contaminated eggs and of  
viral presence in sera of birds. These systems aid in the prevention  
of high loss rates of egg-laying birds in the poultry industry and the  
10 reduction in potential human exposure to these oncogenic  
retroviruses through consumption of contaminated commercial eggs.  
It is further envisioned that detection methods can be modified to  
include viral detection of other samples from various avian origins  
and other animal or human retroviruses.